



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

2018 COST RECOVERY STUDY

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Executive Summary

The 2018 Cost Recovery Study includes the latest cost and revenue data gathered for FYE 2017 (i.e., July 1, 2016 - June 30, 2017). The results of this 2018 Cost Recovery Study will be used as a tool in the preparation of the FYE 2019 budget, and for evaluating potential amendments to the District's Regulation 3: Fees.

The completed cost recovery analysis indicates that in FYE 2017 there continued to be a revenue shortfall, as overall direct and indirect costs of regulatory programs exceeded fee revenue. For FYE 2015 to 2017, the District is recovering approximately 84 percent of its fee-related activity costs. The overall magnitude of this cost recovery gap was determined to be approximately \$8 million. This cost recovery gap was filled using General Fund revenue received by the District from the counties' property tax revenue.

The 2018 Cost Recovery Study also addressed fee-equity issues by analyzing whether there is a revenue shortfall at the individual Fee Schedule level. It was noted that of the twenty-three Fee Schedules for which cost recovery could be analyzed, eight of the component Fee Schedules had fee revenue contributions exceeding total cost.

Background

The District is responsible for protecting public health and the environment by achieving and maintaining health-based national and state ambient air quality standards, and reducing public exposure to toxic air contaminants, in the nine-county Bay Area region. Fulfilling this task involves reducing air pollutant emissions from sources of regulated air pollutants, and maintaining these emission reductions over time. In accordance with State law, the District's primary regulatory focus is on stationary sources of air pollution.

The District's air quality programs are primarily funded by revenue from regulatory fees, government grants and subventions, and county property taxes. Between 1955 and 1970, the District was funded entirely through property taxes. In 1970, the California Air Resources Board (CARB) and U.S. Environmental Protection Agency began providing grant funding to the District. After the passage of Proposition 13, the District qualified as a "special district" and became eligible for AB-8 funds, which currently make up the county revenue portion of the budget.

State law authorizes the District to impose a schedule of fees to generate revenue to recover the costs of activities related to implementing and enforcing air quality programs. On a regular basis, the District has considered whether these fees result in the collection of a sufficient and appropriate amount of revenue in comparison to the cost of related program activities.

In 1999, a comprehensive review of the District's fee structure and revenue was completed by the firm KPMG Peat Marwick LLP (*Bay Area Air Quality Management*

District Cost Recovery Study, Final Report: Phase One – Evaluation of Fee Revenues and Activity Costs; February 16, 1999). The Study recommended an activity-based costing model, which has been implemented. Also, as a result of that Study, the District implemented a time-keeping system. These changes improved the District's ability to track costs by programs and activities. The 1999 Cost Recovery Study indicated that fee revenue did not offset the full costs of program activities associated with sources subject to fees as authorized by State law. Property tax revenue (and in some years, fund balances) have been used to close this gap.

In 2004, the District's Board of Directors approved funding for an updated Cost Recovery Study that was conducted by the accounting/consulting firm Stonefield Josephson, Inc. (*Bay Area Air Quality Management District Cost Recovery Study, Final Report; March 30, 2005*). This Cost Recovery Study analyzed data collected during the three-year period FYE 2002 through FYE 2004. It compared the District's costs of program activities to the associated fee revenues, and analyzed how these costs are apportioned amongst the fee-payers. The Study indicated that a significant cost recovery gap existed. The results of this 2005 report and subsequent internal cost recovery studies have been used by the District in its budgeting process, and to set various fee schedules.

In 2011, another study was completed in March, 2011 by Matrix Consulting Group (*Cost Recovery and Containment Study, Bay Area Air Quality Management District, Final Report; March 9, 2011*). The purpose of this Cost Recovery and Containment Study was to provide the District with guidance and opportunities for improvement regarding its organization, operation, and cost recovery/allocation practices. A Cost Allocation Plan was developed and implemented utilizing FYE 2010 expenditures. This study indicated that overall, the District continued to under-recover the costs associated with its fee-related services. In order to reduce the cost recovery gap, further fee increases were recommended to be adopted over a period of time in accordance with a Cost Recovery Policy to be adopted by the District's Board of Directors. Also, Matrix Consulting Group reviewed and discussed the design and implementation of the new Production System which the District is developing to facilitate cost containment through increased efficiency and effectiveness.

District staff initiated a process to develop a Cost Recovery Policy in May 2011, and a Stakeholder Advisory Group was convened to provide input in this regard. A Cost Recovery Policy was adopted by the District's Board of Directors on March 7, 2012. This policy specifies that the District should amend its fee regulation, in conjunction with the adoption of budgets for Fiscal Year Ending (FYE) 2014 through FYE 2018, in a manner sufficient to increase overall recovery of regulatory program activity costs to 85 percent. The policy also indicates that amendments to specific fee schedules should continue to be made in consideration of cost recovery analyses conducted at the fee schedule-level, with larger increases being adopted for the schedules that have the larger cost recovery gaps.

In February 2018, the Matrix Consulting Group completed an update of the 2011 cost recovery and containment study for fiscal year ended June 30, 2017. The primary purpose of this study was to evaluate the indirect overhead associated with the District and the cost recovery associated with the fees charges by the District. The project

team evaluated the District's current programs to classify them as direct or indirect costs, as well as the time tracking data associated with each of the different fee schedules. This study provides specific recommendations related to direct and indirect cost recovery for the District, as well as potential cost efficiencies.

This 2018 Cost Recovery Study incorporates the accounting methodologies developed by KPMG in 1999, Stonefield Josephson, Inc. in 2005 and Matrix Consulting Group in 2011. The study includes the latest cost and revenue data gathered for FYE 2017 (i.e., July 1, 2016 - June 30, 2017). The results of the 2018 Cost Recovery Study will be used as a tool in the preparation of the FYE 2019 budget, and for evaluating potential amendments to the District's Regulation 3: Fees.

Legal Authority

In the post-Prop 13 era, the State Legislature determined that the cost of programs to address air pollution should be borne by the individuals and businesses that cause air pollution through regulatory and service fees. The primary authority for recovering the cost of District programs and activities related to stationary sources is given in Section 42311 of the Health and Safety Code (HSC), under which the District is authorized to:

- Recover the costs of programs related to permitted stationary sources
- Recover the costs of programs related to area-wide and indirect sources of emissions which are regulated, but for which permits are not issued
- Recover the costs of certain hearing board proceedings
- Recover the costs related to programs that regulate toxic air contaminants

The measure of the revenue that may be recovered through stationary source fees is the full cost of all programs related to these sources, including all direct program costs and a commensurate share of indirect program costs. Such fees are valid so long as they do not exceed the reasonable cost of the service or regulatory program for which the fee is charged, and are apportioned amongst fee payers such that the costs allocated to each fee-payer bears a fair or reasonable relationship to its burden on, and benefits from, the regulatory system.

Air districts have restrictions in terms of the rate at which permit fees may be increased. Under HSC Section 41512.7, permit fees may not be increased by more than 15 percent on a facility in any calendar year.

Study Methodology

The methodology for determining regulatory program revenue and costs is summarized as follows:

Revenue

Revenue from all permit renewals and applications during the FYE 2017 was assigned to the appropriate Permit Fee Schedules. This is an improvement over prior years'

process due to the more detailed data becoming available in the New Production System.

Costs

Costs are expenditures that can be characterized as being either direct or indirect. Direct costs can be identified specifically with a particular program or activity. Direct costs include wages and benefits, operating expenses, and capital expenditures used in direct support of those particular activities of the District (e.g. permit-related activities, grant distribution, etc).

Indirect costs are those necessary for the general operation of the District as a whole. Often referred to as “overhead”, these costs include accounting, finance, human resources, facility costs, information technology, executive management, etc. Indirect costs are allocated to other indirect programs, using the reciprocal (double-step down) method, before being allocated to direct programs.

The District has defined units (known as “Programs”) to encompass activities which are either dedicated to mission-critical functions such as permitting, rule-making, compliance assurance, sampling and testing, grant distribution, etc., or are primarily dedicated to support and administrative functions. The District has also defined revenue source categories (known as “Billing Codes”) for the permit fee schedules, grant revenue sources, and general support activities.

Employee work time is tracked by hour, or fraction thereof, using both Program and Billing Code detail. This timekeeping system allows all costs allocatable to a revenue source to be captured on a level-of-effort basis.

Employee work time is allocated to activities within programs by billing codes (BC1-BC99), only two of which indicate general support. One of these two general support codes is identified with permitting activities of a general nature, not specifically related with a particular Fee Schedule.

Operating and capital expenses are charged through the year to each Program, as incurred. In cost recovery, these expenses, through the Program’s Billing Code profile, are allocated on a pro-rata basis to each Program’s revenue-related activity. For example, employees working in grant programs (i.e., Smoking Vehicle, Mobile Source Incentive Fund, etc.) use specific billing codes (i.e., BC3, BC17, etc.), and all operating/capital expense charges are allocated pro-rata to those grant activities. Employees working in Permit programs (i.e., Air Toxics, Compliance Assurance, etc.) also use specific billing codes (i.e., BC8, BC21, BC29, etc.) and all operating/capital expense charges incurred by those programs are allocated pro-rata to those program’s profiles of permit activities.

Direct costs for permit activities include personnel, operating and capital costs based on employee work time allocated to direct permit-related activities, and to general permit-related support and administrative activities (allocated on pro-rata basis). Indirect costs for permit activities include that portion of general support personnel, operating and capital costs allocated pro-rata to permit fee revenue-related programs.

Study Results

Figure 1 shows a summary of overall regulatory program costs and revenue for FYE 2017. Figure 2 shows the details of program costs and revenue on a fee schedule basis for FYE 2017 by schedule. Figure 3 shows the details of average program costs and revenue for the three-year period FYE 2015 through FYE 2017 by schedule.

Discussion of Results

Figure 1 indicates that in FYE 2017 there continued to be a revenue shortfall, as the direct and indirect costs of regulatory programs exceeded fee revenue. For FYE 2017, the District is recovering approximately 83 percent of its fee-related activity costs. The overall magnitude of the cost recovery gap was determined to be \$9.0 million for FYE 2017. This cost recovery gap was filled by General Fund revenue received by the District from the counties.

Figure 2 shows that in FYE 2017 there were revenue shortfalls for most of the twenty-three fee schedules for which cost recovery can be analyzed. The revenue collected exceeded program costs for eight fee schedules. These are Schedule B (Combustion of Fuel), Schedule C (Stationary Containers for the Storage of Organic Liquids), Schedule G-3 (Miscellaneous Sources), Schedule G-5 (Miscellaneous Sources), Schedule L (Asbestos Operations), Schedule S (Naturally Occurring Asbestos Operations), Schedule W (Refinery Emissions Tracking), and Schedule X (Community Air Monitoring). The revenue collected was less than program costs for 15 fee schedules. These are Schedule A (Hearing Board), Schedule D (Gasoline Transfer at Gasoline Dispensing Facilities, Bulk Plants and Terminals), Schedule E (Solvent Evaporating Sources), Schedule F (Miscellaneous Sources), Schedule G-1 (Miscellaneous Sources), Schedule G-2 (Miscellaneous Sources), Schedule G-4 (Miscellaneous Sources), Schedule H (Semiconductor and Related Operations), Schedule I (Dry Cleaners), Schedule K (Solid Waste Disposal Sites), Schedule N (Toxic Inventory Fees), Schedule P (Major Facility Review Fees), Schedule R (Equipment Registration Fees), Schedule T (Greenhouse Gas Fees), and Schedule V (Open Burning).

Figure 3 shows that over a three-year period (FYE 2015 through FYE 2017) the revenue collected exceeded program costs for seven fee schedules. These are Schedule B (Combustion of Fuel), Schedule C (Stationary Containers for the Storage of Organic Liquids), Schedule G-5 (Miscellaneous Sources), Schedule L (Asbestos Operations), Schedule N (Toxic Inventory Fees), Schedule W (Refinery Emissions Tracking), and Schedule X (Community Air Monitoring). The revenue collected was less than program costs for 16 fee schedules. These are Schedule A (Hearing Board), Schedule D (Gasoline Transfer at Gasoline Dispensing Facilities, Bulk Plants and Terminals), Schedule E (Solvent Evaporating Sources), Schedule F (Miscellaneous Sources), Schedule G-1 (Miscellaneous Sources), Schedule G-2 (Miscellaneous Sources), G-3 (Miscellaneous Sources), G-4 (Miscellaneous Sources), Schedule H (Semiconductor and Related Operations), Schedule I (Dry Cleaners), Schedule K (Solid Waste Disposal Sites), Schedule P (Major Facility Review Fees), Schedule R (Equipment Registration Fees), Schedule S (Naturally Occurring Asbestos Operations), Schedule T (Greenhouse Gas Fees), and Schedule V (Open Burning).

The District has used the three-year averages shown in Figure 3 in evaluating proposed amendments to Regulation 3, Fees at the fee schedule level because longer averaging periods are less sensitive to year-to-year variations in activity levels that occur due to regulatory program changes affecting various source categories.

Conclusions

District staff has updated the analysis of cost recovery of its regulatory programs based on the methodology established by the accounting firms KPMG in 1999 and Stonefield Josephson, Inc. in 2005 and updated by Matrix Consulting Group in 2011. The analysis shows that fee revenue continues to fall short of recovering program activity costs. For FYE 2015 to 2017, the District is recovering approximately 84 percent of its fee-related activity costs. The overall magnitude of this cost recovery gap was determined to be \$8 million.

To reduce or stabilize expenditures, the District has implemented various types of cost containment strategies including developing an on-line permitting system for high-volume source categories, maintaining unfilled positions when feasible, reducing service and supply budgets, and others. In order to reduce the cost recovery gap, further fee increases will need to be evaluated in accordance with the Cost Recovery Policy adopted by the District's Board of Directors.



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2018 Cost Recovery Study

FIGURES

Figure 1: Total Permit Fee Revenue, Costs and Gap for FYE 2017

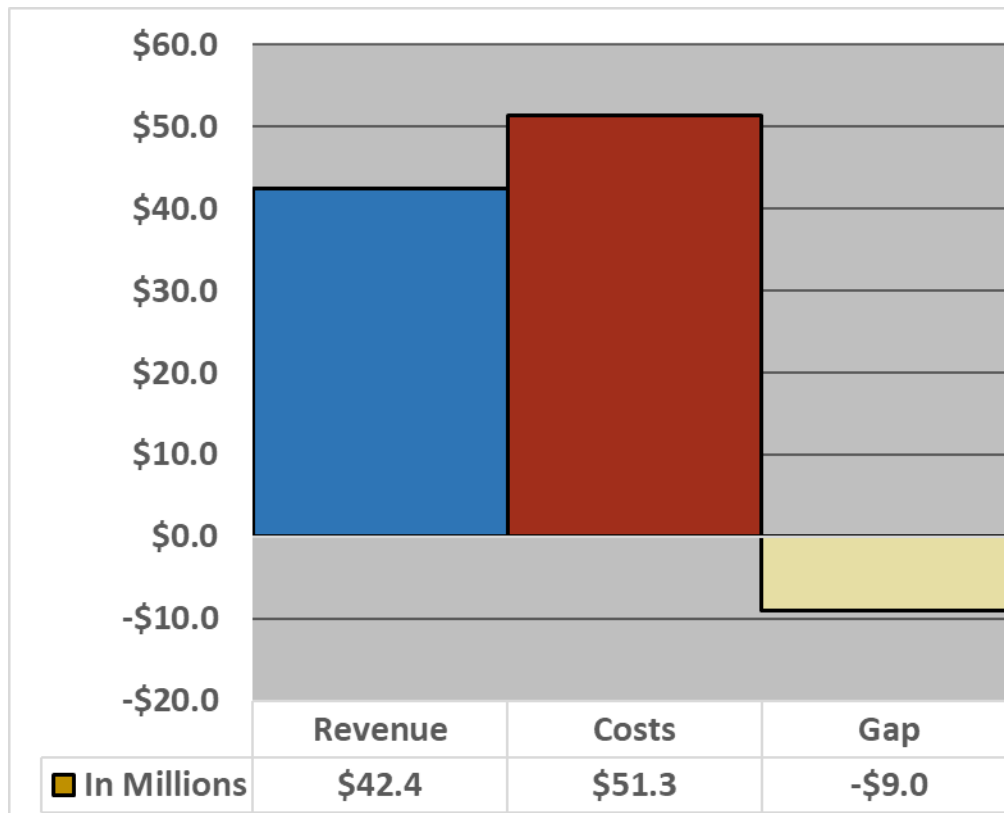


Figure 2: Fee Revenue and Program Costs by Fee Schedule, FYE 2017

	A-Hearing Board	B - Combustion of Fuel	C - Storage Organic Liquid	D - Gasoline Dispensing / Bulk Terminals	E - Solvent Evaporation	F - Miscellaneous	G1 - Miscellaneous	G2 - Miscellaneous	G3 - Miscellaneous	G4 - Miscellaneous	G5 - Miscellaneous	H - Semiconductor	I - Drycleaners	K - Waste Disposal	L - Asbestos	N - Toxic Inventory (AB2588)	P - Major Facility Review (Title V)	R-Registration	S - Naturally Occurring Asbestos	T - GreenHouse Gas	V - Open Burning	W - Refinery Emissions Tracking	X - Community Air Monitoring	Total
Revenues	5,722	7,921,353	2,114,960	5,222,586	2,528,815	1,807,705	2,374,407	554,738	647,280	954,879	647,564	115,481	4,448	150,361	4,108,669	214,311	5,088,243	237,105	101,934	2,179,797	151,781	324,000	1,131,169	38,587,308
Schedule M	-	992,309	154,193	68,981	14,815	385,179	134,850	0	1,612	3,360	331,465	-	-	91,135	-	-	-	-	-	-	-	-	-	2,177,898
Reg 3- 312 - Bubble	-	575,352	169,943	45,504	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	790,800
Reg 3- 327 - Renewal Processing	-	103,533	52,106	211,110	223,809	158,616	47,233	6,887	-	854	675	6,959	991	5,056	-	-	-	-	-	-	-	-	-	817,829
Reg 3- 311 - Banking	-	6,930	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,930
Total Revenue	5,722	9,599,477	2,491,202	5,548,181	2,767,439	2,351,500	2,556,491	561,626	648,892	959,093	979,704	122,440	5,439	246,552	4,108,669	214,311	5,088,243	237,105	101,934	2,179,797	151,781	324,000	1,131,169	42,380,765
Direct Costs																								
Direct Labor	111,298	5,271,672	431,078	3,816,976	2,024,538	1,459,489	3,341,655	595,682	339,362	1,883,212	207,221	200,027	103,775	683,632	2,074,175	205,988	3,272,134	292,801	54,603	1,268,385	612,253	34,409	284,568	28,568,936
Services and Supplies	3,669	452,507	19,302	397,854	120,023	199,581	273,808	58,082	21,482	255,288	10,953	6,861	7,886	49,836	195,300	20,130	436,574	12,668	3,226	130,674	61,147	11,347	19,977	2,768,176
Capital Outlay	0	324,961	8,842	220,634	43,003	39,271	442,178	31,290	13,067	273,366	382	2,462	1,722	62,353	401,228	0	162,213	625	1,555	185,406	8,320	30,389	26,111	2,279,377
Indirect Costs	53,132	3,273,174	297,296	2,376,290	1,364,832	844,751	2,107,901	342,339	232,618	1,030,228	145,484	135,343	70,708	465,800	1,326,923	130,642	1,941,921	206,971	38,721	749,052	406,282	13,255	171,891	17,725,553
Total Costs	168,099	9,322,314	756,517	6,811,754	3,552,397	2,543,093	6,165,542	1,027,393	606,529	3,442,094	364,040	344,693	184,091	1,261,621	3,997,627	356,760	5,812,842	513,065	98,105	2,333,516	1,088,002	89,400	502,547	51,342,042
Net Surplus/(Deficit)	(162,377)	277,163	1,734,684	(1,263,573)	(784,958)	(191,593)	(3,609,051)	(465,767)	42,362	(2,483,001)	615,663	(222,253)	(178,653)	(1,015,070)	111,042	(142,449)	(724,598)	(275,961)	3,829	(153,719)	(936,221)	234,600	628,622	(8,961,277)
Cost Recovery	3.4%	103.0%	329%	81%	78%	92%	41%	55%	107%	27.9%	269%	36%	3%	19.5%	103%	60%	87.5%	46%	104%	93.4%	14%	362%	225%	82.55%

Figure 3: Fee Revenue and Program Costs by Fee Schedule, FYE 2015-2017, 3-Year Average

	A-Hearing Board	B - Combustion of Fuel	C - Storage Organic Liquid	D - Gasoline Dispensing / Bulk Terminals	E - Solvent Evaporation	F - Miscellaneous	G1 - Miscellaneous	G2 - Miscellaneous	G3 - Miscellaneous	G4 - Miscellaneous	G5 - Miscellaneous	H - Semiconductor	I - Drycleaners	K - Waste Disposal	L - Asbestos	N - Toxic Inventory (AB2588)	P - Major Facility Review (Title V)	R-Registration	S - Naturally Occurring Asbestos	T - GreenHouse Gas	V - Open Burning	W - Refinery Emissions Tracking	X - Community Air Monitoring	Total
Revenues	16,655	7,499,745	2,098,684	4,706,153	2,351,542	1,673,397	2,239,338	534,000	689,744	971,393	648,905	144,978	10,456	134,486	3,693,324	308,541	4,862,678	210,313	82,501	2,245,425	158,074	324,000	1,131,169	36,735,501
Schedule M	0	1,196,107	135,884	45,671	33,174	317,525	145,179	22,232	5,073	117,386	214,606	0	0	95,984	0	0	0	0	0	0	0			2,328,821
Reg 3- 312 - Bubble	0	543,011	120,716	30,026	2,791	17,609	6,386	7,281	1,345	37,760	2,681	0	0	13,129	0	0	0	0	0	0	0			782,736
Reg 3- 327 - Renewal Processing	0	166,034	57,195	205,423	192,000	161,037	48,441	7,758	714	808	715	6,355	1,816	4,070	0	0	0	0	0	0	0			852,366
Reg 3- 311 - Banking	0	5,279	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			5,279
Total Revenue	16,655	9,410,176	2,412,480	4,987,273	2,579,506	2,169,568	2,439,343	571,271	696,877	1,127,348	866,906	151,333	12,272	247,669	3,693,324	308,541	4,862,678	210,313	82,501	2,245,425	158,074	324,000	1,131,169	40,704,702
Direct Costs																								
Direct Labor	197,566	4,844,116	383,625	3,435,880	1,984,127	1,365,138	2,532,636	642,878	404,605	1,819,722	175,183	164,729	104,510	871,971	1,767,197	155,025	3,159,598	300,356	47,000	1,367,561	524,230	34,409	284,568	26,566,629
Services and Supplies	16,021	363,941	18,902	276,177	109,720	110,045	186,212	53,352	26,320	201,321	9,109	6,904	6,683	54,497	136,589	12,819	275,248	14,892	2,801	115,774	39,475	11,347	19,977	2,068,126
Capital Outlay	18,879	496,039	31,734	342,015	170,825	119,211	317,235	64,641	38,991	244,585	12,737	12,482	8,882	98,021	261,036	10,282	309,766	23,429	3,912	176,803	40,610	30,389	26,111	2,858,616
Indirect Costs	243,670	3,081,260	252,625	2,197,969	1,296,857	821,780	1,623,654	412,018	274,072	1,175,726	107,951	108,222	68,909	590,515	1,176,295	97,207	1,992,966	200,912	32,075	849,737	347,320	13,255	171,891	17,136,884
Total Costs	476,135	8,785,356	686,886	6,252,041	3,561,528	2,416,174	4,659,737	1,172,888	743,988	3,441,354	304,979	292,336	38,984	1,615,004	3,341,117	275,333	5,737,578	539,590	85,788	2,509,874	951,636	89,400	502,547	48,630,255
Total Surplus/(Deficit)	(459,480)	624,821	1,725,594	(1,264,768)	(982,023)	(246,607)	(2,220,394)	(601,617)	(47,111)	(2,314,007)	561,927	(141,003)	(26,712)	(1,367,335)	352,206	33,208	(874,900)	(329,277)	(3,288)	(264,449)	(793,562)	234,600	628,622	(7,925,553)
Cost Recovery	3%	107%	351%	80%	72%	90%	52%	49%	94%	33%	284%	52%	31%	15%	111%	112%	85%	39%	96%	89%	17%	362%	225%	84%